### HEARTS N' PARKS: 5TH P—PERFORMANCE INDICATORS

Performance indicators are the hidden treasure of Hearts N' Parks. At the end of the first season, the North Carolina professionals involved with Hearts N' Parks said it was one of the biggest draws for their involvement with the project. Everything you need to gather performance indicators is included in the Community Mobilization Guide. This chapter and appendices A and B contain performance measures for children (less than 10 years old), adolescents (11-17 years old), and adults (more than 18 years old) that assess their knowledge, attitudes, and behaviors about physical activity, heart-healthy eating, and the risk factors related to coronary heart disease. We've also included directions for administering and scoring the measures.

Your ability to demonstrate the impact of your programs on the health of your community is a big plus. The Hearts N' Parks program provides directions, model surveys, and plenty of suggestions to help you measure that impact.

Performance indicators enable you to:

- Document the factual results of your programs.
- Determine if your programs and services are making a difference to your community.
- Provide information for decision-makers, funding sources, and the public.
- Suggest how to improve your programs.
- Reinforce the efforts of staff.

### Types of Indicators

The Hearts N' Parks program utilizes two types of performance measurements. The first type is the **activity indicators** that measure what has been done by the program: numbers of brochures distributed, programs sponsored, participants served. These are often tracked by age group, gender, and ethnicity. This involves tracking, for example, the number of people who received a fact sheet on how physical activity reduces the risk of CVD, sampled food at a healthy cooking demonstration, or attended the "How To Start a Walking Program" clinic.

Tracking of activity could also include other elements of Hearts N' Parks, such as the number of community organizations attending an initial Hearts N' Parks partners meeting or the number of news articles about Hearts N' Parks in local newspapers.



### **Tracking Sheet for Activities**

Activity	Number of Participants	Age Group	Number of Screenings	Number of PSAs	

Source: The Sports Guide: NHLBI Planning Guide for Cardiovascular Risk Reduction Projects at Sporting Events.

Outcome indicators are the second type of measurement used in the Hearts N' Parks program. These data demonstrate a program's success in achieving important outcomes. While activity indicators keep track of "how many," outcome indicators give us an understanding of "what happened." Outcomes are the participant benefits that may be acquired during or after their involvement with a Hearts N' Parks program.

As informative as activity indicators can be, they are not as meaningful as outcome indicators. There is a difference between a person who picks up the "Achieving Your Healthy Weight Tip Sheet" and the person who actually loses weight.

Outcome indicators may include:

- The number of people who improved their knowledge about heart-healthy behavior.
- The percentage of people who changed their attitudes toward a healthy diet.
- The increase in the number of people who engage in the recommended amount of physical activity per week.



According to data collected at the North Carolina Hearts N' Parks sites in Summer 1999, youth participants showed significant improvements in their knowledge about healthy eating and their intention to eat a healthier diet (7 percent and 9 percent improvements, respectively). Scores for healthy eating improved slightly.

Youth participants also indicated that, on average, they learned four new kinds of physical activity and got better at six different activities.

In the adult program, the biggest improvement occurred in healthy-eating habits, which improved by 6 percent. Improvement was also made in participants' desire to follow dietary guidelines (a 5 percent increase). Adult participants also reported that, on average, they felt that they were in better health by the end of the program.





Collecting, tracking, and sharing these statistics as part of your Hearts N' Parks initiative helps the NHLBI discover the effectiveness of park, recreation, and leisure-related community service agencies' efforts in reaching people and building awareness for heart-healthy behavior.

Organizations such as yours benefit from:

- Enhanced recognition!
- Added credibility!
- The potential for new partnerships, sponsorships, and funding!

### **GETTING STARTED**

There are a number of things to think about and choices to be made in planning to conduct performance measurements. Consider selecting one youth program and one adult program for purposes of measurement until your department becomes more comfortable with the process.

Decisions about the programs to be measured can be based on a number of factors.

#### **Program Considerations:**

A natural starting point might be to select a

program that lends itself to both the incorporation of heart-healthy activities and suitability for conducting pretests and posttests.

### **People Considerations:**

You might decide to measure whether the program changed the attitudes and behavior of, say, overweight males between the ages of 20 and 50. You might decide to use a group for whom you can easily secure permission for involvement in measurement or whose involvement lends itself to the pretest and posttest measurement schedule.

Appendix A contains the **Program Design** and **Development Tracking Sheet.** The following information moves through the decisions that need to be made.

### CONDUCTING THE ASSESSMENT

You know at this point which programs are going to be measured. Make sure program staff incorporated heart-healthy elements into their scheduled program activities. Just take a few minutes to check these activities necessary to ensure the value of this process.

### **Selecting and Using Assessment Tools**

Be sure to select assessment tools that are appropriate for the specific group whose outcomes are being measured. See the measures included in appendix A for guidance.

Example: Giving children a survey that they are unable to comprehend would influence the results OR giving people an instrument measuring knowledge of blood pressure when you want to measure food shopping habits would be useless.

Pretests and Posttests. To measure changes in knowledge, skills, attitudes, or behavior, it is necessary to measure them before the program starts and after the program ends. A second followup 6 months or after completion of the program, is of even greater value to see if changes continue over time.

Example: Youth enrolled in a summer camp program complete the Physical Activity pretest on the first day of camp and then the posttest on the last day of camp. OR participants in a senior exercise program complete the Food and Eating Habits survey during the first week of class and then again at the end of the 10 weeks.

**Size of Sample.** It is not necessary to survey all participants in a program. Select a manageable number to be surveyed who are representative of the program population. Suppose your

community has six after-school programs. Rather than survey all children in each program, survey 20 percent of the participants in each program or all participants in two of the six programs.

The Need for Consistency. The approaches and timing of the pretests and posttests should be as consistent as possible. Things you should try to keep the same include instructions to participants about completing surveys as well as the time and day if tests are administered to more than one group with similar members. If staff at one day camp helped children complete their food forms and staff at other day camps did not, the results may differ. If two groups of senior citizens are not given the test on the same day and the second group takes the test after a news story on heart disease, that too could change the results.

Tracking Participants. The tests track changes in knowledge, attitudes, and behaviors. Assign each individual a number to help ensure privacy; use the same number on both pretest and posttest.

**Informed Consent.** You must obtain the informed consent of participants in the tests. If your participants are under 18, you must seek informed consent from their parents.

Example: As part of the day camp registration parents were sent a letter indicating that their child would be part of this program, asked to sign a consent form and given a phone number to contact the department if they had any questions or objections. Adults are asked to sign a form indicating their understanding of what they will be asked to do as part of this process and their agreement.



### In appendices A and B are several items to help you conduct assessments.

### They include:

- Survey instruments: "What's Your Food, Physical Activity and Heart Health I.Q." for children, adolescents, and adults
- Answer keys for the surveys
- Score sheets for the surveys
- Log sheets to record participant identification numbers
- Tracking sheets
- Sample permission letter
- Sample permission form



The following are activities and resources that you might use as part of the programming aspect to help people better understand heart-healthy behavior.

#### Possible Outcomes:

- Increase their knowledge of leisure-time physical activity
- Increase their skill levels in leisure-time physical activity
- Improve their attitude towards physical activity
- Increase their level of physical activity
- Increase their knowledge of healthy eating
- Increase their skill level related to healthy eating
- Improve their attitude towards healthy eating
- Increase their level of healthy eating

### Appropriate Reproducibles:

■ See Resources chart, Information Sheets on page 49. These materials are found in the reproducible section of this guide.



Your department can take various steps to increase the accuracy of outcome measurements:

**Program Group and Comparison Group.** Outcomes measurement in community recreation programs usually involves one group—for example, all adults who attend a swimming program.

To improve the accuracy of your assessment results, create a comparison group and involve one of those program groups in the heart-healthy information and activities. The other program group called the comparison group is not exposed to the healthy information and activities.

Example: Your department sponsors after-school programs at several local elementary schools. Some of the programs receive the special heart-healthy activities and some of them do not, but both groups take pretests and posttests.

**Self-Selected Groups.** Most participants in recreation programs are self-selected, meaning that they themselves made the decision to become involved or, in the case of children, have parents who made that decision for them. This means that your measurements cannot necessarily be generalized to a larger population, such as all senior citizens or all Hispanic women.

Example: Teens who regularly show up at your department's midnight basketball program may be different from other teens in the neighborhood who choose not to be a part of this program.

**Random Selection.** You can also improve the generalizability of your assessment by randomly selecting the participants whose outcomes will be measured. In this way, participation in the program is determined by chance, ensuring that those tested are more representative of the larger population.

Example: Slips of paper with the names of 50 adults in a senior lunch program are placed in a bowl; the first 20 names randomly selected are invited to participate in a fitness program. If you can't select participants randomly, you may be able to systematically select program sites. That will allow you to avoid selecting sites whose outcomes might bias the results because these sites are more conveniently located for participants or because more program staff members have a greater interest in operating the program.

**Multiple Measures.** Another way to boost the rigor of your assessment is to use all of the measures in the sample surveys.

### **ANALYZING AND REPORTING RESULTS**

Instructions for administering and scoring your participants' performance assessments are provided on pages 91 and 92. Answer keys and scoring sheets are found in appendix B.

- Be sure that you've selected the right instruments—children, for example, should take tests designed for children in their age bracket.
- Be sure that you've selected the right scoring sheets.

After you've scored each individual test, add up the scores of all participants and divide by the number of participants. This will give you the **average score** for the group. It may help you to write all the scores on one page, total them, then divide by the number of scores.

### **DISPLAYING THE RESULTS**

The scoring sections have been grouped according to knowledge, attitudes, and behaviors regarding healthy eating and physical activity. Why not create related posters or trifold bulletin boards?

- After you've scored the pretests, display the group scores on a bulletin board and challenge participants to improve their scores when they take the posttest.
- After you've scored the posttests, display the scores next to the pretest scores.
- Congratulate participants and site personnel on a job well done if scores improve, even if the improvement is small.
- If you don't see improvement at posttest, check your scoring. Maybe you've made a simple error. If not, encourage participants to do better next time.

Utilize graphic resources in the guide or download clip art from the Web to highlight the scores.



## Countdown Checklist: 5th P—Performance Indicators

GETTING STARTED	
Ask program staff to use tracking sheets to record distribution participants and of activities engaged in by participants.	tion of program information to
During training, identify programs that will be involved in t	the performance measurement process.
Hold training for staff who will be involved in performance	ce measurement.
Determine the elements to be measured in each program so the	ne programs can be planned accordingly.
Moving Forward	
Develop program schedules that include adequate time for	r pretests and posttests.
Coordinate the program schedule and the pretest and posts information and activities that are being measured.	test dates with the presentation of
Appoint someone to make sure that program activities and	d testing schedule stay on target.
Hold an orientation meeting for staff who will deliver the and posttest.	program and administer the pretest
Appoint someone to be responsible for analysis of the test	S.
Ask that information on program implementation be forward can be shared with staff, partners, and the NHLBI.	arded to the program coordinator so it
KEEP THE BEAT	a anadan sisibilitas fan sasın affirm
Use the information from measurement indicators to creat	e greater visibility for your efforts

 _Identify other programs or services whose outcomes will be measured.
_Share results of measurement indicators with staff, partners, decision-makers, the media, and
the public.

and to make program modifications.

# Outline of Staff Training for Performance Measurement

**People Involved:** Program supervisors and other staff whose programs have been selected for outcomes measurement.

Time Allotted: 2 hours

#### Goals:

- 1. Create an understanding of the performance measurement process and its elements.
- 2. Review the measurement instruments.
- 3. Identify informational materials and program activities that support program goals and desired outcomes.
- 4. Address questions and concerns.

### Materials and Resources (Appendix A):

- Pretest and posttests (appendix A)
- Permission letters/forms (appendix A)
- Program Design and Development Tracking Sheet (appendix A)
- Directions ("Recommendations for Administering the Pretests and Posttests" is a good resource for staff training.) (pages 91 and 92)

#### Overheads or Handouts:

- FAQ—activity and outcome indicators (at the end of this chapter, page 93)
- Program Design and Development Tracking Sheet (appendix A)
- "Conducting the Assessment" (this chapter, page 84)
- "Do You Know?" information boxes (this chapter, page 86)

### **Suggested Topics and Activities:**

Overview of Outcomes Measurement Process (45 minutes):

- Why outcomes
- Difference between activity measures and outcomes measures
- Measurement requirements
- Improving the accuracy of the results

# Outline of Staff Training for Performance Measurement (continued)

### **Staff Tasks (45 minutes):**

- Permission letters and forms
- Tracking sheets
- Timing of pretest and posttest
- Directions for conducting tests
- Identify or reinforce the program activities that relate to the outcomes being measured

### **Break (10 minutes):**

### Creating a program and schedule (40 minutes):

- Selecting appropriate information
- Designing and delivery of activities and exercises
- Coordinating activities and testing

### Role play test administration (10 minutes):

- Read instructions
- Pass out materials
- Take the tests

**Questions, Comments, Suggestions (10 minutes)** 

# RECOMMENDATIONS FOR ADMINISTERING HEARTS N' PARKS Pretests and Posttests

### 1. It is important to administer pretests before the program begins.

You should allow about 45 minutes for a group to complete the questionnaire. It is also important that adult participants not consult one another, and that children not share answers. Try to find a place for the assessment that is quiet and allows a reasonable amount of space between participants.

If you do not want to conduct a single 45-minute assessment, administer sections of the questionnaire at separate times for, say, 20 minutes each (for example, nutrition section one day, physical activity the next). If you do so, make sure that all sections are completed within a few days. Don't let the time between the start and finish of a test span more than a week.

# 2. Emphasize to participants that the purpose of questionnaires is not to evaluate them personally.

Explain that their identities and answers will remain confidential and that the results will be displayed only as group results. Try not to refer to them as "tests."

### 3. Use a log sheet to keep track of every person who completes a pretest and posttest.

It is important to evaluate participants by matching pretest and posttest results.

Assign IDs that are consistent in format and anonymous for each test-taker. A Hearts N' Parks log sheet is provided to keep track of participants' names and IDs (so that you can be sure to match up names and numbers for pretest and posttest). Keep this log sheet private.

# 4. If administering a questionnaire becomes unmanageable because of the number of participants, you may be better off using a small sample.

If possible, let the sample consist of 40 to 50 test-takers per age group.

If you decide to select a sample, you have a few choices:

If you administer multiple programs, select one with a sufficient number of participants (more than 20) to take part in the pretest and posttest.

You can create a random sample by having all participants pick numbers out of a hat to determine which ones will complete the instruments. Make sure that the same people selected for the pretest are the ones who take the program posttest. (Don't do a separate hat drawing for the posttest.)

If your program is small (less than 30 in an age group), it is important to have every participant complete a pretest and posttest.

### Note the ID blanks on the first page of the tests and make sure cover sheets are attached to questionnaires.

The cover sheet indicates whether the test is to be taken before the program begins or after it ends. Participants' IDs are to be written on these sheets so that pretests and posttests can be matched up.

The pretest and posttest formats for the adult and adolescent tests are identical, but different cover sheets are provided (to distinguish the adults' and adolescents' questionnaires as pretests or posttests). Attach the appropriate cover sheet.

Children's pretests and posttests are slightly different in format so the pretests and posttests have a different cover sheet.

Using different colors of paper for the pretest and posttest can help prevent mix-ups.

 If you conducted a program that did not discuss the causes of high blood pressure or how to control high cholesterol, participants need not complete those sections of the pretest and posttest.

# RECOMMENDATIONS FOR ADMINISTERING HEARTS N' PARKS Pretests and Posttests (continued)

### 7. Scoring and Displaying Group Scores.

Score sheets and answer keys are provided for each type of questionnaire. Follow the directions on the score sheets and use the answer keys to record test scores. Add the scores together for everyone in the same group, and then divide by the number of test-takers to determine the group's mean score on each section. You may break down scores by section to focus on knowledge, attitude, behavior, etc., or to look specifically at heart-healthy eating or physical activity.

Example: Adolescent Questionnaires—Participants' Scores

Nutrition knowledge scores:

 $7+7+6+10+11+9+9+8+12+9=88 \div 10=8.8$ 

Mean score for the group (n=10 participants) is **8.8 out of 12.** 

Overweight/obesity knowledge scores:

 $5+9+6+9+9+8+7+6+8+5=72 \div 10=7.2$ 

Mean score for the group (n=10) is **7.2 out of 9.** 

Attitude toward healthy eating scores:

24+32+30+22+29+36+35+21+25+27=**281**  $\div$  10=28.1

Mean score for the group (n=10) is **28.1 out of 40.** 

Overweight/obesity attitude scores:

22+26+25+30+29+24+23+23+20+22=**244**  $\div$  10=24.4

Mean score for the group (n=10) is **24.4 out of 32.** 

Healthy eating behavior scores:

 $4+5+4+7+5+5+6+5+7+4=52 \div 10=5.2$ 

Mean score for the group (n=10) is **5.2 out of 8.** 

Healthy eating intentions scores:

 $4+3+2+5+3+6+4+3+3+5=38 \div 10=3.8$ 

Mean score for the group (n=10) is **3.8 out of 7.** 

Consider creating a display of group scores on a poster or bulletin board to highlight improvements made by participants in the program. Highlighting group improvements could serve to motivate participants toward continued good health. Do not display or discuss individual scores openly. However, if an individual asks about his/her scores, you should discuss them with him/her in private.

## Trequently Asked Questions



# 1 What is the purpose of using the performance measures and how would I use the information once I got it?

Performance measures are the best way of tracking the progress of participants. A record of progress can be a good motivator for further progression and an indicator of program success to be shared with the program's management and partners, as well as with the media. Likewise, quantitative performance measurements can be used as evidence of improvement to be displayed on fact sheets and posters that generate excitement about progress gained by participants in the community.

The success of the Hearts N' Parks program, as well as your own specific program, relies heavily on the ability of the NRPA and the NHLBI to evaluate participants' development. These questionnaires help to show not only how participants' knowledge and habits have progressed, but also what specific parts of the program are in need of modification, and where some programs may need help relative to others.

## 2 What if I don't have time to have my participants fill out questionnaires?

The central purpose of the program is to help people learn how to live more hearthealthy lives, not to take questionnaires. Program coordinators should schedule time for filling out questionnaires so that valuable learning and activity times are not missed for the sake of completing the questionnaires.

### 3 How are activity indicators different from outcome indicators?

An *activity indicator* refers to Hearts N' Parks activities conducted by your department.

An *outcome indicator* measures the impact of these activities on participants.



